

WHAT IS CLAIMED IS:

- 1 1. A key auditing system, comprising:
2 a key server, that provides access to a secret key by an authorized user;
3 a resource server, that provides access to resources to authorized users, wherein
4 authorization of a user is determined, at least in part, by the user's possession of a
5 secret key;
6 a key server audit database;
7 a resource server audit database; and
8 a usage analyzer that analyzes the key server audit database and the resource server audit
9 database to compare events therein.
- 1 2. The key auditing system of claim 1, wherein the resource server is an
2 application server.
- 1 3. The key auditing system of claim 1, wherein the resource server is a
2 transaction server.
- 1 4. The key auditing system of claim 1, wherein the key server maintains a
2 protection key usable to unlock a secret key held by a user workstation and the resource
3 server is configured to block access to a resource unless and indication of the unlocking of
4 the secret key at the user workstation is provided.
- 1 5. The key auditing system of claim 4, wherein the secret key is such that it is
2 only accepted within a pre-determined time period.
- 1 6. The key auditing system of claim 1, wherein events are compared
2 according to a profile that specifies conditions under which keys can be used.
- 1 7. The key auditing system of claim 6, wherein the conditions include time
2 delay limits between when a key is accessed and when the key is used.
- 1 8. The key auditing system of claim 6, wherein the conditions include limits
2 on a number of times that key can be used on a resource server in a given session.
- 1 9. The key auditing system of claim 6, wherein the conditions include
2 whether key usage would be allowed where key access is from a first network address or first

3 location and key usage is from a second network address distinct from the first network
4 address or from a second location distinct from the first location.

1 10. The key auditing system of claim 1, wherein the usage analyzer is
2 configured to analyze and compare audit database records in real-time.

1 11. The key auditing system of claim 10, wherein the usage analyzer is
2 configured to trigger a disablement of a key usage in real-time response to audit database
3 record comparisons.

1 12. The key auditing system of claim 1, wherein the usage analyzer is
2 configured as part of the key server.